Amendments to the Claims:

The listing of claims below will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-520. (Canceled)

521. (Previously presented) An apparatus for cutting a tubular member, comprising:
a support member;
a plurality of movable cutting elements coupled to the support member;
an actuator coupled to the support member for moving the cutting elements between a first position and a second position; and
a sensor coupled to the support member for sensing the internal diameter of the tubular member;
wherein in the first position, the cutting elements do not engage the tubular member; wherein in the second position, the cutting elements engage the tubular member; and wherein the sensor prevents the cutting elements from being moved to the second
position if the internal diameter of the tubular member is less than a predetermined value.

522. (Previously presented) The apparatus of claim 521, wherein the cutting elements comprise:
a first set of cutting elements;
a second set of cutting elements; and
wherein the first set of cutting elements are interleaved with the second set of cutting elements.

523. (Previously presented) The apparatus of claim 522, wherein in the first position, the first set of cutting elements are not axially aligned with the second set of cutting elements.

524. (Previously presented) The apparatus of claim 522, wherein in the second position, the first set of cutting elements are axially aligned with the second set of cutting elements.

525. (Previously presented) An apparatus for gripping a tubular member, comprising:

a plurality of movable gripping elements;

wherein the gripping elements are moveable from a first position to a second position; wherein in the first position, the gripping elements do not engage the tubular member; wherein in the second position, the gripping elements do engage the tubular member; and wherein, during the movement from the first position to the second position, the gripping elements move in a radial and an axial direction.

526. (Previously presented) The apparatus of claim 525, wherein, in a first axial direction, the gripping device grips the tubular member; and wherein, in a second axial direction, the gripping device does not grip the tubular member.

527. (Previously presented) The apparatus of claim 525, further comprising an actuator for moving the gripping elements.

528. (Previously presented) The apparatus of claim 525, wherein the gripping elements comprise:

a plurality of separate and distinct gripping elements.

529. (Canceled)

530. (Canceled)

531. (Previously presented) The method of claim 530, wherein the outside diameter of the expansion device is less than the inside diameter of the tubular member.

532. (Previously presented) The method of claim 530, wherein the expansion device is positioned within the tubular member.

533. (Previously presented) The method of claim 530, wherein the expansion device comprises an adjustable expansion device.

534. (Previously presented) The method of claim 533, wherein the adjustable expansion device is adjustable to a plurality of sizes.

535. (Previously presented) The method of claim 530, wherein the expansion device comprises a plurality of expansion devices.

536. (Previously presented) The method of claim 535, wherein at least one of the expansion devices comprises an adjustable expansion device.

537. (Previously presented) The method of claim 536, wherein at least one of the adjustable expansion device is adjustable to a plurality of sizes.

538. (Canceled)

539. (Previously presented) The method of claim 538, wherein lowering an expansion

device out of an end of the tubular member comprises:

lowering the expansion device out of the end of the tubular member; and

adjusting the size of the expansion device.

540. (Previously presented) The method of claim 539, wherein the adjustable expansion device is adjustable to a plurality of sizes.

541. (Previously presented) The method of claim 539, wherein the expansion device comprises a plurality of adjustable expansion devices.

542. (Previously presented) The method of claim 541, wherein at least one of the adjustable expansion devices is adjustable to a plurality of sizes.

543. (Previously presented) The method of claim 538, wherein pulling the expansion device through the end of the tubular member comprises:

gripping the tubular member; and

pulling an expansion device through an end of the tubular member.

544. (Previously presented) The method of claim 544, wherein gripping the tubular member comprises:

permitting axial displacement of the tubular member in a first direction; and not permitting axial displacement of the tubular member in a second direction.

545. (Previously presented) The method of claim 545, wherein pulling the expansion device through the end of the tubular member comprises:

pulling the expansion device through the end of the tubular member using an actuator.

546. (Canceled)

547. (Previously presented) The method of claim 546, wherein lowering an expansion device out of an end of the tubular member comprises:

lowering the expansion device out of the end of the tubular member; and

adjusting the size of the expansion device.

548. (Previously presented) The method of claim 547, wherein the adjustable expansion device is adjustable to a plurality of sizes.

549. (Previously presented) The method of claim 547, wherein the expansion device comprises a plurality of adjustable expansion devices.

550. (Previously presented) The method of claim 549, wherein at least one of the adjustable expansion devices is adjustable to a plurality of sizes.

551. (Previously presented) The method of claim 546, wherein pulling the expansion device through the end of the tubular member comprises:

gripping the tubular member; and

pulling an expansion device through an end of the tubular member.

552. (Previously presented) The method of claim 551, wherein gripping the tubular member comprises:

permitting axial displacement of the tubular member in a first direction; and not permitting axial displacement of the tubular member in a second direction.

553. (Previously presented) The method of claim 551, wherein pulling the expansion device through the end of the tubular member comprises: pulling the expansion device through the end of the tubular member using an actuator.

554. (Previously presented) The method of claim 546, wherein pulling the expansion device through the end of the tubular member comprises: pulling the expansion device through the end of the tubular member using fluid pressure.

555. (Previously presented) The method of claim 554, wherein pulling the expansion device through the end of the tubular member using fluid pressure comprises: pressurizing an annulus within the tubular member above the expansion device.

556. (Previously presented) The method of claim 529 wherein radially expanding and plastically deforming a portion of the tubular member above the bell section comprises:

fluidicly sealing an end of the tubular member; and

pulling the expansion device through the tubular member.

557. (Previously presented) The method of claim 556, wherein the expansion device is adjustable.

558. (Previously presented) The method of claim 557, wherein the expansion device is adjustable to a plurality of sizes.

559. (Previously presented) The method of claim 556, wherein the expansion device comprises a plurality of adjustable expansion devices.

560. (Previously presented) The method of claim 559, wherein at least one of the adjustable expansion devices is adjustable to a plurality of sizes.

561. (Previously presented) The method of claim 556, wherein pulling the expansion device through the end of the tubular member comprises:

gripping the tubular member; and

pulling an expansion device through an end of the tubular member.

562. (Previously presented) The method of claim 561, wherein gripping the tubular member comprises: permitting axial displacement of the tubular member in a first direction; and not permitting axial displacement of the tubular member in a second direction.

563. (Previously presented) The method of claim 561, wherein pulling the expansion device through the end of the tubular member comprises: pulling the expansion device through the end of the tubular member using an actuator.

564. (Previously presented) The method of claim 556, wherein pulling the expansion device through the end of the tubular member comprises:

pulling the expansion device through the end of the tubular member using fluid pressure.

565. (Previously presented) The method of claim 564, wherein pulling the expansion device through the end of the tubular member using fluid pressure comprises: pressurizing an annulus within the tubular member above the expansion device.

566. (Canceled)

567. (Previously presented) The method of claim 566 wherein the expansion device is adjustable.

568. (Previously presented) The method of claim 567 wherein the expansion device is adjustable to a plurality of sizes.

569. (Previously presented) The method of claim 566 wherein the expansion device comprises a plurality of adjustable expansion devices.

570. (Previously presented) The method of claim 569, wherein at least one of the adjustable expansion devices is adjustable to a plurality of sizes.

571. (Previously presented) The method of claim 566 wherein pulling the expansion device through the overlapping portions of the tubular member and the preexisting tubular member comprises:

gripping the tubular member; and

pulling the expansion device through the overlapping portions of the tubular member and the preexisting tubular member.

572. (Previously presented) The method of claim 571, wherein gripping the tubular member comprises: permitting axial displacement of the tubular member in a first direction; and not permitting axial displacement of the tubular member in a second direction.

573. (Previously presented) The method of claim 571, wherein pulling the expansion device through the overlapping portions of the tubular member and the preexisting tubular member comprises:

pulling the expansion device through the overlapping portions of the tubular member and

the preexisting tubular member using an actuator.

574. (Previously presented) The method of claim 566 wherein pulling the expansion device through the overlapping portions of the tubular member and the preexisting tubular member comprises:

pulling the expansion device through the overlapping portions of the tubular member and

the preexisting tubular member using fluid pressure.

575. (Previously presented) The method of claim 574, wherein pulling the expansion device through the overlapping portions of the tubular member and the preexisting tubular member using fluid pressure comprises:

pressurizing an annulus within the tubular member above the expansion device.

576. (Previously presented) The method of claim 566 further comprising:

cutting an end of the portion of the tubular member that overlaps with the preexisting tubular member.

577. (Previously presented) The method of claim 576, further comprising:

removing the cut off end of the expandable tubular member from the preexisting structure.

578. (Canceled)

579. (Canceled)

580. (Previously presented) The method of claim 579, further comprising:

removing the cut off end of the expandable tubular member from the preexisting structure.

581. (Previously presented) A method of cutting a tubular member, comprising:

positioning a plurality of cutting elements within the tubular member; and bringing the cutting elements into engagement with the tubular member,

582. (Previously presented) The method of claim 581, wherein the cutting elements comprise:

a first group of cutting elements; and

a second group of cutting elements;

wherein the first group of cutting elements are interleaved with the second group of cutting elements.

583. (Previously presented) The method of claim 581, wherein bringing the cutting elements into engagement with the tubular member comprises: bringing the cutting elements into axial alignment.

584. (Previously presented) The method of claim 583, wherein bringing the cutting elements into engagement with the tubular member further comprises: pivoting the cutting elements.

585. (Previously presented) The method of claim 583, wherein bringing the cutting elements into engagement with the tubular member further comprises:

translating the cutting elements,

586. (Previously presented) The method of claim 583, wherein bringing the cutting elements into engagement with the tubular member further comprises:

pivoting the cutting elements; and

translating the cutting elements.

587. (Previously presented) The method of claim 581, wherein bringing the cutting elements into engagement with the tubular member comprises: rotating the cutting elements about a common axis,

588. (Previously presented) The method of claim 581, wherein bringing the cutting elements into engagement with the tubular member comprises:

pivoting the cutting elements about corresponding axes;

translating the cutting elements; and

rotating the cutting elements about a common axis.

589. (Previously presented) The method of claim 581, further comprising:

preventing the cutting elements from coming into engagement with the tubular member if the inside diameter of the tubular member is less than a predetermined value,

590. (Previously presented) The method of claim 589, wherein preventing the cutting elements from coming into engagement with the tubular member if the inside diameter of the tubular member is less than a predetermined value comprises:

sensing the inside diameter of the tubular member.

591. (Previously presented) A method of gripping a tubular member, comprising:

positioning a plurality of gripping elements within the tubular member; and bringing the gripping elements into engagement with the tubular member.

592. (Previously presented) The method of claim 591, wherein bringing the gripping elements into engagement with the tubular member comprises:

displacing the gripping elements in an axial direction; and

displacing the gripping elements in a radial direction.

593. (Previously presented) The method of claim 591, further comprising: biasing the gripping elements against engagement with the tubular member.

594. (Previously presented) An apparatus for radially expanding and plastically deforming an expandable tubular member, comprising:

a support member;

a cutting device for cutting the tubular member coupled to the support member;

a gripping device for gripping the tubular member coupled to the support member;

a sealing device for sealing an interface with the tubular member coupled to the support member;

a locking device for locking the position of the tubular member relative to the support member;

a first adjustable expansion device for radially expanding and plastically deforming the tubular member coupled to the support member;

a second adjustable expansion device for radially expanding and plastically deforming the tubular member coupled to the support member;

a packer coupled to the support member; and

an actuator for displacing one or more of the sealing assembly, first and second adjustable expansion devices, and packer relative to the support member.

595. (Previously presented) An actuator, comprising:

a tubular housing;

a tubular piston rod movably coupled to and at least partially positioned within the housing;

a plurality of annular piston chambers defined by the tubular housing and the tubular piston rod; and

a plurality of tubular pistons coupled to the tubular piston rod, each tubular piston movably positioned within a corresponding annular piston chamber.

596. (Previously presented) An apparatus for controlling a packer, comprising:

a tubular support member;

one or more drag blocks releasably coupled to the tubular support member; and a tubular stinger coupled to the tubular support member for engaging the packer.

597. (Previously presented) A packer comprising:

a support member defining a passage;

a shoe comprising a float valve coupled to an end of the support member;

one or more compressible packer elements movably coupled to the support member; and

a sliding sleeve valve movably positioned within the passage of the support member.

598. (Previously presented) A method of radially expanding and plastically deforming an expandable tubular member within a borehole having a preexisting wellbore casing, comprising:

positioning the tubular member within the borehole in overlapping relation to the wellbore casing;

radially expanding and plastically deforming a portion of the tubular member to form a bell section; and

radially expanding and plastically deforming a portion of the tubular member above the bell section comprising a portion of the tubular member that overlaps with the wellbore casing;

wherein the inside diameter of the bell section is greater than the inside diameter of the radially expanded and plastically deformed portion of the tubular member above the bell section.

599. (Previously presented) A method for forming a mono diameter wellbore casing, comprising: positioning an adjustable expansion device within a first expandable tubular member; supporting the first expandable tubular member and the adjustable expansion device

within a borehole;

lowering the adjustable expansion device out of the first expandable tubular member; increasing the outside dimension of the adjustable expansion device;

displacing the adjustable expansion device upwardly relative to the first expandable tubular member m times to radially expand and plastically deform m portions of the first expandable tubular member within the borehole;

positioning the adjustable expansion device within a second expandable tubular member;

supporting the second expandable tubular member and the adjustable expansion device

within the borehole in overlapping relation to the first expandable tubular member;

lowering the adjustable expansion device out of the second expandable tubular member; increasing the outside dimension of the adjustable expansion device; and

displacing the adjustable expansion device upwardly relative to the second expandable tubular member n times to radially expand and plastically deform n portions of the second expandable tubular member within the borehole.

600. (Previously presented) A method for radially expanding and plastically deforming an expandable tubular member within a borehole, comprising:

positioning an adjustable expansion device within the expandable tubular member; supporting the expandable tubular member and the adjustable expansion device within the borehole;

lowering the adjustable expansion device out of the expandable tubular member; increasing the outside dimension of the adjustable expansion device;

displacing the adjustable expansion mandrel upwardly relative to the expandable tubular member n times to radially expand and plastically deform n portions of the expandable tubular member within the borehole; and

pressurizing an interior region of the expandable tubular member above the adjustable expansion device during the radial expansion and plastic deformation of the expandable tubular member within the borehole.

601. (Previously presented) A method for forming a mono diameter wellbore casing, comprising: positioning an adjustable expansion device within a first expandable tubular member; supporting the first expandable tubular member and the adjustable expansion device

within a borehole;

lowering the adjustable expansion device out of the first expandable tubular member; increasing the outside dimension of the adjustable expansion device;

displacing the adjustable expansion device upwardly relative to the first expandable tubular member m times to radially expand and plastically deform m portions of the first expandable tubular member within the borehole;

pressurizing an interior region of the first expandable tubular member above the adjustable expansion device during the radial expansion and plastic deformation of the first expandable tubular member within the borehole;

positioning the adjustable expansion mandrel within a second expandable tubular member;

supporting the second expandable tubular member and the adjustable expansion mandrel within the borehole in overlapping relation to the first expandable tubular member;

lowering the adjustable expansion mandrel out of the second expandable tubular member;

increasing the outside dimension of the adjustable expansion mandrel;

displacing the adjustable expansion mandrel upwardly relative to the second expandable tubular member n times to radially expand and plastically deform n portions of

the second expandable tubular member within the borehole; and

pressurizing an interior region of the second expandable tubular member above the adjustable expansion mandrel during the radial expansion and plastic deformation of the second expandable tubular member within the borehole.

602. (Previously presented) A method for radially expanding and plastically deforming an expandable tubular member within a borehole, comprising:

supporting the expandable tubular member, an hydraulic actuator, and an adjustable expansion device within the borehole;

increasing the size of the adjustable expansion device; and

displacing the adjustable expansion device upwardly relative to the expandable tubular member using the hydraulic actuator to radially expand and plastically deform a portion of the expandable tubular member.

603. (Previously presented) A method for forming a mono diameter wellbore casing within a borehole that includes a preexisting wellbore casing, comprising:

supporting the expandable tubular member, an hydraulic actuator, and an adjustable expansion device within the borehole;

increasing the size of the adjustable expansion device;

displacing the adjustable expansion device upwardly relative to the expandable tubular member using the hydraulic actuator to radially expand and plastically deform a portion of the expandable tubular member; and

displacing the adjustable expansion device upwardly relative to the expandable tubular member to radially expand and plastically deform the remaining portion of the expandable tubular member and a portion of the preexisting wellbore casing that overlaps with an end of the remaining portion of the expandable tubular member.

604. (Previously presented) A method of radially expanding and plastically deforming a tubular member, comprising:

applying internal pressure simultaneously to the inside surface of the tubular member at a plurality of discrete locations separated from one another.

605. (Previously presented) A system for radially expanding and plastically deforming an expandable tubular member within a borehole having a preexisting wellbore casing, comprising:

means for positioning the tubular member within the borehole in overlapping relation to the wellbore casing;

means for radially expanding and plastically deforming a portion of the tubular member to form a bell section; and

means for radially expanding and plastically deforming a portion of the tubular member above the bell section comprising a portion of the tubular member that overlaps with the wellbore casing;

wherein the inside diameter of the bell section is greater than the inside diameter of the radially expanded and plastically deformed portion of the tubular member above the bell section.

606. (Previously presented) A system for forming a mono diameter wellbore casing, comprising:

means for positioning an adjustable expansion device within a first expandable tubular

member;

means for supporting the first expandable tubular member and the adjustable expansion

device within a borehole;

means for lowering the adjustable expansion device out of the first expandable tubular member;

means for increasing the outside dimension of the adjustable expansion device;

means for displacing the adjustable expansion device upwardly relative to the first expandable tubular member m times to radially expand and plastically deform m portions of the first expandable tubular member within the borehole;

means for positioning the adjustable expansion device within a second expandable tubular member;

means for supporting the second expandable tubular member and the adjustable expansion device within the borehole in overlapping relation to the first expandable tubular member;

means for lowering the adjustable expansion device out of the second expandable tubular member;

means for increasing the outside dimension of the adjustable expansion device; and

means for displacing the adjustable expansion device upwardly relative to the second expandable tubular member n times to radially expand and plastically deform n portions of the second expandable tubular member within the borehole,

607. (Previously presented) A system for radially expanding and plastically deforming an expandable tubular member within a borehole, comprising:

means for positioning an adjustable expansion device within the expandable tubular member;

means for supporting the expandable tubular member and the adjustable expansion device within the borehole;

means for lowering the adjustable expansion device out of the expandable tubular member;

means for increasing the outside dimension of the adjustable expansion device;

means for displacing the adjustable expansion mandrel upwardly relative to the expandable tubular member n times to radially expand and plastically deform n portions of the expandable tubular member within the borehole; and

means for pressurizing an interior region of the expandable tubular member above the adjustable expansion device during the radial expansion and plastic deformation of the expandable tubular member within the borehole.

608. (Previously presented) A system for forming a mono diameter wellbore casing, comprising:

means for positioning an adjustable expansion device within a first expandable tubular member;

means for supporting the first expandable tubular member and the adjustable expansion device within a borehole;

means for lowering the adjustable expansion device out of the first expandable tubular member;

means for increasing the outside dimension of the adjustable expansion device;

means for displacing the adjustable expansion device upwardly relative to the first expandable tubular member m times to radially expand and plastically deform m portions of the first expandable tubular member within the borehole;

means for pressurizing an interior region of the first expandable tubular member above the adjustable expansion device during the radial expansion and plastic deformation of the first expandable tubular member within the borehole;

means for positioning the adjustable expansion mandrel within a second expandable tubular member;

means for supporting the second expandable tubular member and the adjustable expansion mandrel within the borehole in overlapping relation to the first expandable tubular member;

means for lowering the adjustable expansion mandrel out of the second expandable tubular member;

means for increasing the outside dimension of the adjustable expansion mandrel;

means for displacing the adjustable expansion mandrel upwardly relative to the second expandable tubular member n times to radially expand and plastically deform n portions of the second expandable tubular member within the borehole; and

means for pressurizing an interior region of the second expandable tubular member above the adjustable expansion mandrel during the radial expansion and plastic deformation of the second expandable tubular member within the borehole.

609. (Previously presented) A system for radially expanding and plastically deforming an expandable tubular member within a borehole, comprising:

means for supporting the expandable tubular member, an hydraulic actuator, and an adjustable expansion device within the borehole;

means for increasing the size of the adjustable expansion device; and

means for displacing the adjustable expansion device upwardly relative to the expandable tubular member using the hydraulic actuator to radially expand and plastically deform a portion of the expandable tubular member.

610. (Previously presented) A system for forming a mono diameter wellbore casing within a borehole that includes a preexisting wellbore casing, comprising:

means for supporting the expandable tubular member, an hydraulic actuator, and an adjustable expansion device within the borehole;

means for increasing the size of the adjustable expansion device;

means for displacing the adjustable expansion device upwardly relative to the expandable tubular member using the hydraulic actuator to radially expand and plastically deform a portion of the expandable tubular member; and

means for displacing the adjustable expansion device upwardly relative to the expandable tubular member to radially expand and plastically deform the remaining portion of the expandable tubular member and a portion of the preexisting wellbore casing that overlaps with an end *of* the remaining portion of the expandable tubular member.

611. (Previously presented) A system for radially expanding and plastically deforming a tubular member, comprising:

means for positioning the tubular member within a preexisting structure;

means for radially expanding and plastically deforming a lower portion of the tubular member to form a bell section; and

means for radially expanding and plastically deforming a portion of the tubular member above the bell section.

612. (Previously presented) A system of radially expanding and plastically deforming a tubular member, comprising:

a support member; and

means for applying internal pressure simultaneously to the inside surface of the tubular member at a plurality of discrete location separated from one another coupled to the support member.

613. (Previously presented) A method of injecting a hardenable fluidic sealing material into an annulus between a tubular member and a preexisting structure, comprising:

positioning the tubular member into the preexisting structure;

sealing off an end of the tubular member;

operating a valve within the end of the tubular member; and

injecting a hardenable fluidic sealing material through the valve into the annulus between the tubular member and the preexisting structure.

614. (Previously presented) A system for cutting a tubular member, comprising:

means for positioning a plurality of cutting elements within the tubular member; and means for bringing the cutting elements into engagement with the tubular member.

615. (Previously presented) An actuator system, comprising:

a support member; and means for pressurizing a plurality of pressure chambers coupled to the support member.